

REMARKS

This is a full and timely response to the Office Action mailed January 16, 2009, submitted concurrently with a Request for Continued Examination.

By this Amendment, claim 1 has been amended to more particularly define the present invention. Further, new claim 13 has been added to further protect a specific embodiment of the present invention. Thus, claims 1-13 are currently pending in this application. Support for the claim amendments and new claim can be readily found variously throughout the specification and the original claims, see, in particular, page 8, lines 11-12; page 13, lines 16-19; and page 14, line 19, to page 15, line 8; of the specification.

In view of these amendments, Applicant believes that all pending claims are in condition for allowance. Reexamination and reconsideration in light of the above amendments and the following remarks is respectfully requested.

Obviousness-Type Double Patenting Rejections

Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over the claims of copending U.S. Patent Application Nos. 10/588,437, 10/588,729, and 10/588,779. Applicant has submitted herewith Power of Attorneys executed by the individual assignees, namely Panasonic Electric Works, Ltd. and Proctor & Gamble Company, to validate the previously filed terminal disclaimers for U.S. Patent Application Nos. 10/588,437, 10/588,729, and 10/588,779 in accordance with U.S. practice. Thus, withdrawal of these rejections is respectfully requested.

Rejection under 35 U.S.C. §103

Claims 1-6 and 9-10 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Jeffries et al. (U.S. Patent No. 5,221,050) in view of Coffee et al. (U.S. Patent No. 6,595,208).

To establish an obviousness rejection under 35 U.S.C. §103(a), four factual inquiries must be examined. The four factual inquiries include (a) determining the scope and contents of the prior art; (b) ascertaining the differences between the prior art and the claims in issue; (c) resolving

the level of ordinary skill in the pertinent art; and (d) evaluating evidence of secondary consideration. *Graham v. John Deere*, 383 U.S. 1, 17-18 (1966). In view of these four factors, the analysis supporting a rejection under 35 U.S.C. §103(a) should be made explicit, and should "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l. Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385, 1396 (2007). Further, the Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Finally, even if the prior art may be combined, there must be a reasonable expectation of success, and the reference or references, when combined, must disclose or suggest all of the claim limitations. *See in re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Claim 1, as amended, recites, *inter alia*:

said housing incorporating an electric motor which drives said actuator for operating said supplying means

Jeffries et al. in view of Coffee et al. fails to teach or suggest at least this feature of amended claim 1.

Jeffries et al. discloses a housing that incorporates a motor (102) that drives an actuator for operating supplying means. However, Jeffries et al. is directed to an electrostatic spray with a *manually operable* trigger (102), which moves the drive plate (42) and compresses the sachet (30) for dispensing the liquid. Jeffries et al. does not teach the use of an *electric motor* as a source.

Coffee et al. discloses a pump being mechanically connected to an actuator to be driven thereby, and a field electrode being connected to a high voltage generator for providing the entire liquid composition with more or less common electric potential. The embodiment of Figure 4 of Coffee et al. uses a piezoelectric element (64), which may be an electric motor in a broader sense, but Coffee et al. fails to disclose that the electric motor (64) drives the *actuator carried by the housing* and mechanically connected to the supply means (pump). Rather, the device of Coffee et al. teaches that the electric motor (64) is incorporated in the pump chamber (32a) together with the

supply pipe (33) and the conductive rod (41). Thus, Coffee et al. fails to teach that the electric motor is separated from the pump unit, i.e., the dispensing unit.

As such, neither Jeffries et al. nor Coffee et al. teaches or suggests the use of an electric motor, which is separated from the dispensing unit and is mechanically connected to the supply means of the dispensing unit through an actuator.

Claim 1, as amended, further recites, *inter alia*:

said reservoir being shaped to have a planar configuration of a general segment of circle defined between a chord and a circumference of an approximate circle which is greater than a circumference of a semicircle,
said mouth being disposed at a center of said chord

Jeffries et al. in view of Coffee et al. also fails to teach or suggest this feature of amended claim 1. This geometrical feature is advantageous because it increases the amount of the liquid within the reservoir in the form of a flat-shaped bag, and allows the last liquid to be squeezed out from the reservoir in combination with the motor-operating supplying means (i.e., the pump). To assist the Examiner to better understand the differences in the above claimed feature of the present invention and that of Jeffries et al., Applicant has submitted annotated drawings of the present invention (see Fig. 27) and Jeffries et al. (see Fig. 1, 3, 4, 5 and 8) which highlights the differences. Applicant requests the Examiner to pay close attention to the "segment of circle" shape and the location of the mouth relative to the chord in Figure 27 of the present drawings as compared to Figures 1, 3, 4, 5 and 8 of Jeffries et al.

Further still, claim 1 recites, *inter alia*:

wherein the device further comprises a field electrode being connected to the high voltage generator for providing the entire liquid composition with more or less a common electric potential

Jeffries et al. in view of Coffee et al. also fails to teach or suggest this feature of claim 1. The Examiner concedes that Jeffries et al. fails to teach this feature and relies on Coffee et al. to cure the deficiency in Jeffries et al. (see pages 5-6 of the Office Action).

Coffee et al. discloses:

A further electrode 60 is positioned so as to be separated from the comminution site 40 by the discharge electrode 50. In the arrangement shown in FIG. 2, the discharge electrode 50 and

further electrode 60 are concentrically disposed with respect to the comminution site so that the discharge electrode 50 surrounds the comminution site 40 and is in turn surrounded by the further electrode 60. The further electrode may extend as far as the outlet 4 of the housing.

The further electrode 60 comprises a perforate electrically conductive or semiconductive body which may, effectively, form an inner wall of the second chamber 3b so as to bound a comminution chamber or area 3a (*apparently 3b*) of the device. For example the further electrode 60 may comprise a tube or cage of wire mesh. The wall 7 of the second chamber 3b is formed with one or more apertures 8 to allow air to enter the second chamber 3b. The apertures may be symmetrically disposed around the comminution site so as to facilitate a symmetrical airflow.

The comminution site 40, discharge electrode 50 and further electrode 60 are connected to respective voltage outputs 22, 23 and 24 of the voltage generator and control circuit 21 which is arranged to provide respective voltages so that *the voltage applied to the further electrode 60 is intermediate the voltages applied to the comminution site 40 and the discharge electrode 50*. In this example, the circuit 21 is arranged to supply a negative voltage to the comminution site 40, a positive voltage to the discharge electrode 50 and earth or ground potential to the further electrode 60. The further electrode 60 has the further advantage of shielding the comminution chamber 3a from external electromagnetic fields so that the electrical fields within the device are not detrimentally affected when, for example, the device is held by a user (see column 5, line 58, to column 6, line 8, of Coffee et al.) (emphasis added)

Coffee et al. further discloses:

As the user breaths in, air is entrained through the apertures 8 in the second chamber 3b and through the perforate further electrode 60 into the comminution chamber bounded by the further electrode 60. This general movement of air through the perforate electrode 60 hinders or inhibits charged liquid droplets or other charged comminution products from impacting on the electrode 60. (see column 6, line 66, to column 7, line 7, of Coffee et al.) (emphasis added)

The field electrode of claim 1 provides the entire liquid composition with more or less a common electric potential. However, as apparent from the above recited disclosure, Coffee et al. teaches the use of an additional electrode having a different electric potential from the comminution

site and surrounding only the comminution site for providing the different potential to only a portion of the liquid advancing to the comminution site. Thus, Coffee et al. fails to teach or suggest a field electrode which provides the entire liquid composition with more or less a common electric potential as required by the present claims.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §103(a) rejection of claim 1. Claims 2-6 and 9-10 depend directly or indirectly from claim 1 and are allowable at least for this reason. Since none of the other prior art of record discloses or suggests all the features of the claimed invention, Applicant respectfully submits that independent claim 1, and all the claims that depend therefrom, are allowable.

Claims 7-8 and 11-12 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Jeffries et al. (U.S. Patent No. 5,221,050) in view of Coffee et al. (U.S. Patent No. 6,595,208), and further in view of Hartle et al. (U.S. Patent No. 5,725,161).

Applicant respectfully submits that claim 1 is allowable over Jeffries et al. in view of Coffee et al., and Hartle et al. fails to cure the deficiency of Jeffries et al. in view of Coffee et al. noted above with regard to claim 1. Hence, claims 7-8 and 11-12 are allowable at least because they depend from allowable claim 1.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §103(a) rejection of claims 7-8 and 11-12.

New Claim

Newly added claim 13 is directed to additional aspects of the present invention that are not disclosed or suggested by the prior art of record. More specifically, the prior art of record fails to disclose or suggest "*said field electrode is fixed in said housing around said concavity to surround said reservoir placed into said concavity.*"

CONCLUSION

For the foregoing reasons, all the claims now pending in the present application are believed to be clearly patentable over the outstanding rejections. Accordingly, favorable reconsideration of the claims in light of the above remarks is courteously solicited. If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

Dated: April 16, 2009

Respectfully submitted,

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Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 50-4422 for any such fees; and applicant(s) hereby petition for any needed extension of time.

12/16

FIG. 25

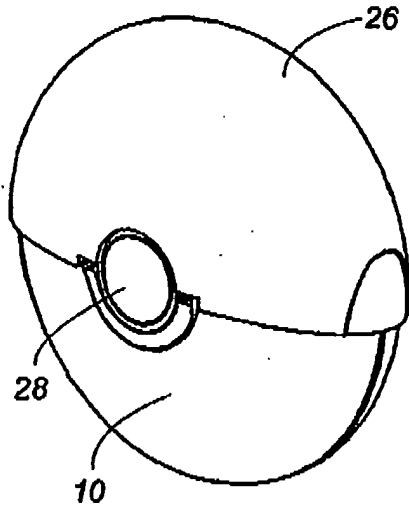


FIG. 26

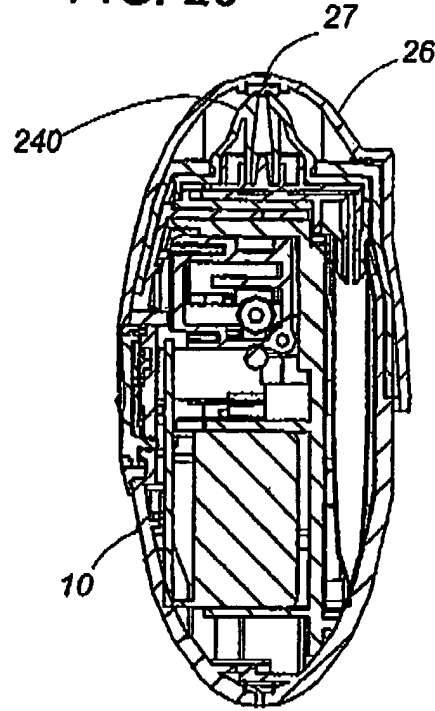


FIG. 27

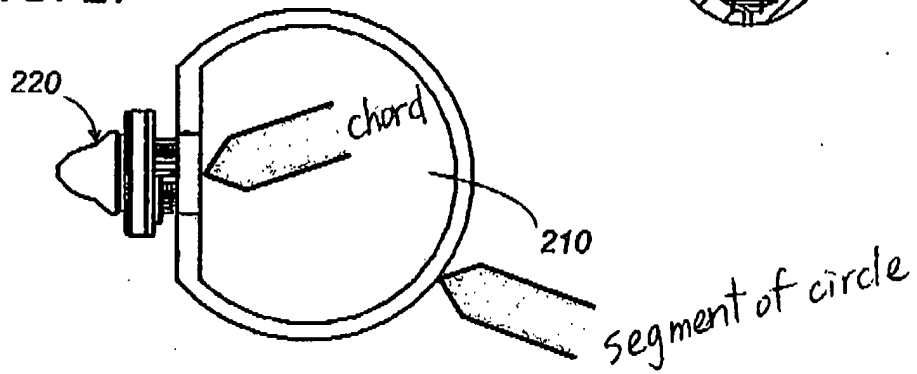


FIG. 28

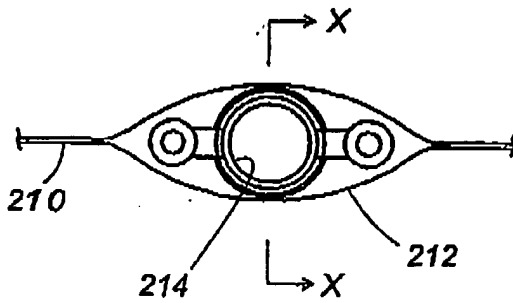


FIG. 29

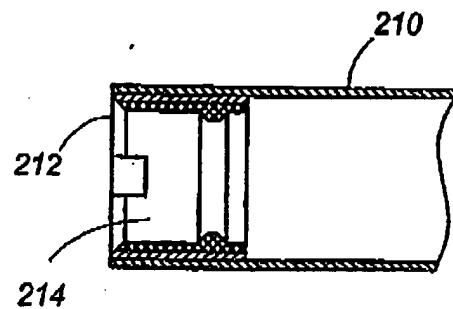


Fig. 1.

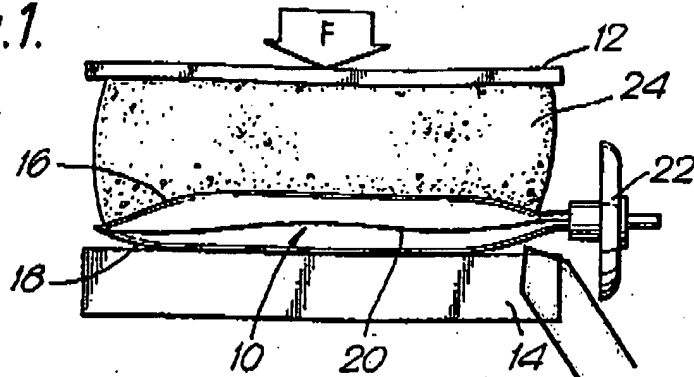
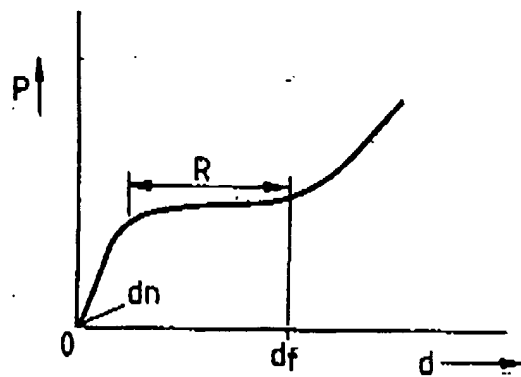


Fig. 2.



shape not known

Fig. 3.

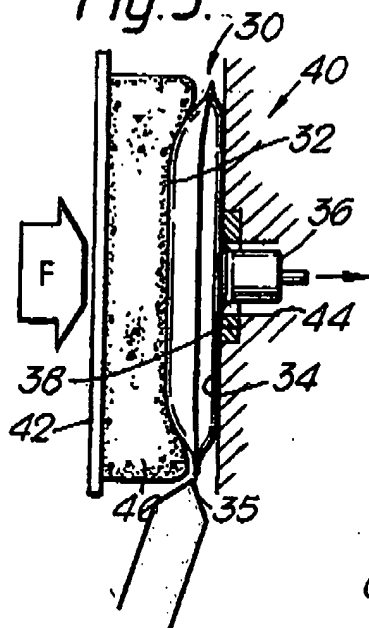
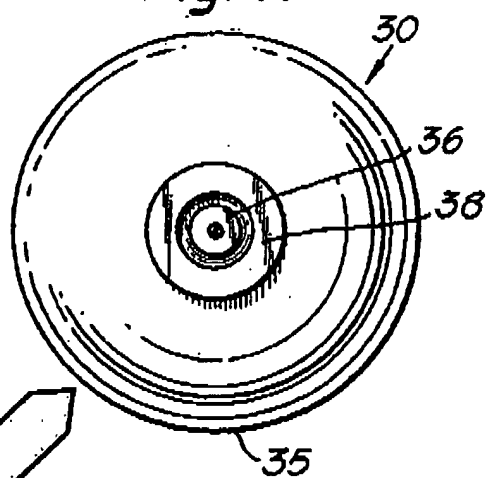
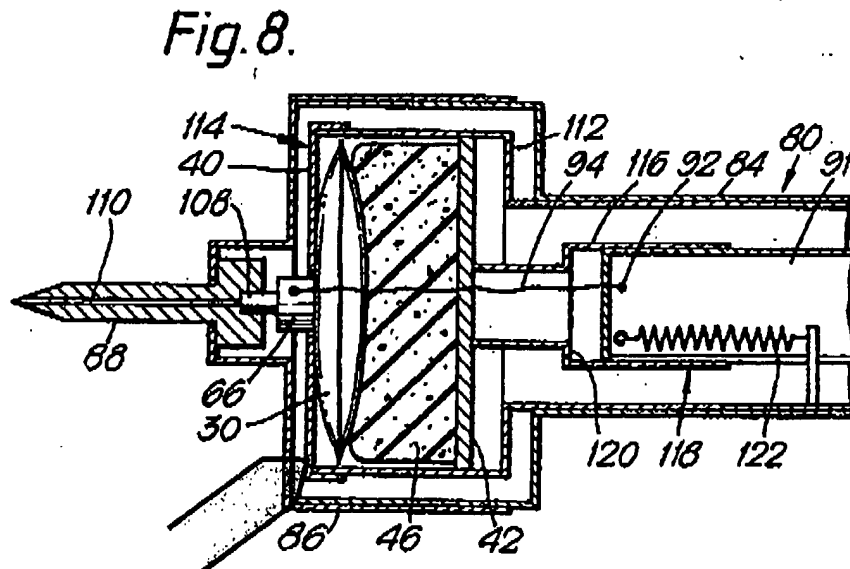
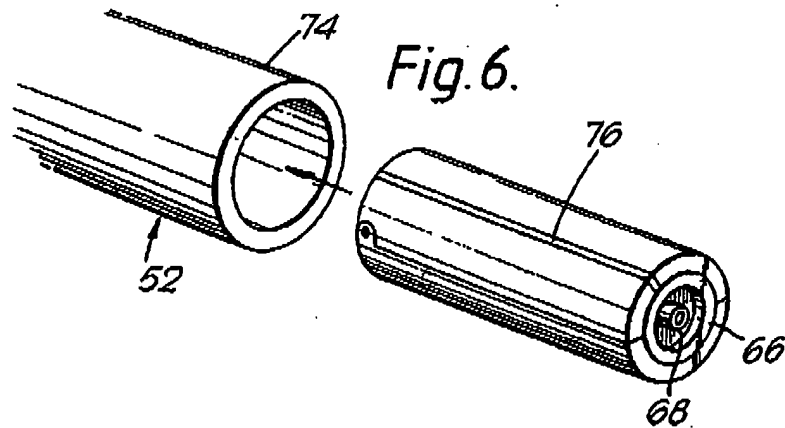
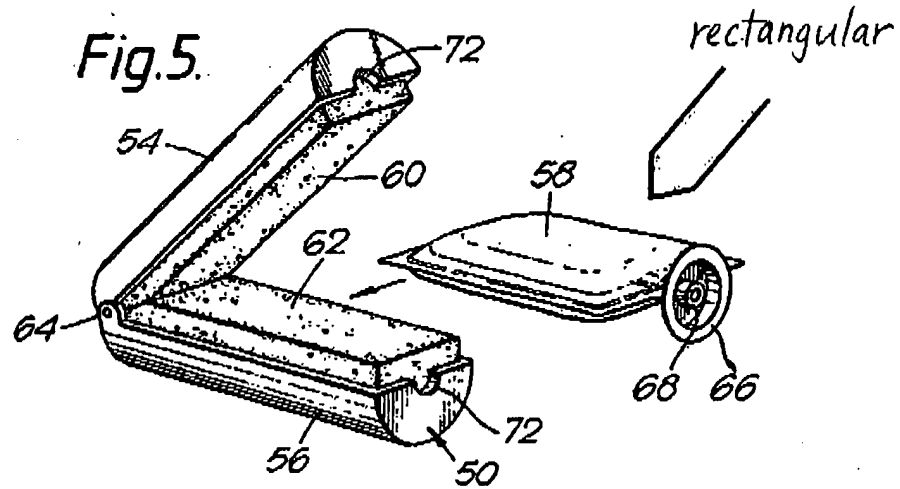


Fig. 4.



complete circle with no chord

shape not known



shape not known